



A
MODERN APPRENTICESHIP
IN THE
GAS INDUSTRY

**FRAMEWORK DOCUMENT
FOR
SCOTLAND**

Energy & Utility Skills

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(SVQs lapsing and withdrawn updated September 2015)

Energy & Utility Skills
Friars Gate
1011 Stratford Road
Shirley
Solihull
B90 4BN

The logo for Energy & Utility Skills, consisting of the text "energy&utilityskills" in a white, lowercase, sans-serif font, set against a solid purple rectangular background.

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Modern Apprenticeship

In the

Gas Industry

Framework Document for Scotland



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1 Modern Apprenticeships in Scotland

What are Modern Apprenticeships?

Modern Apprenticeships offer those aged over 16 paid employment combined with the opportunity to train for jobs at craft, technician and management level.

Who develops them?

Modern Apprenticeships are developed by Sector Skills Councils (SSCs) and Sector Skills Bodies (SSBs). SSCs and SSBs consult with employers and key partners in their sector to produce a training programme, which meets the needs of employers.

Who are they for?

Modern Apprenticeships are available to employees aged 16 or over. Employees need to demonstrate to their employer that they have the potential to complete the programme.

What's in a Modern Apprenticeship?

In Scotland, there are more than 80 different Modern Apprenticeship Frameworks and they all contain the same 3 basic ingredients:

- S/NVQ level 3
- Core Skills
- Industry specific training

Details of the content of this specific Modern Apprenticeship are given in the next section.

2 Modern Apprenticeships in Gas Industry

Energy & Utility Skills is the licensed Sector Skills Council for the gas, electricity, waste management and water sectors and, as such, is responsible for developing and maintaining the Gas Industry Modern Apprenticeship on behalf of sector employers in Scotland.

The term “beach to burner” is often used to summarise the breadth of the gas industry. It primarily covers the activities associated with the distribution of gas (“upstream”) and the fitting/maintenance of gas equipment within the customers’ property (“downstream”).

Upstream gas consists of the transportation of gas from the beach terminals through the National Transmission System (NTS), into the Local Distribution System and then up to, and including the main control valve usually adjacent to the meter. The NTS is operated by National Grid on a monopoly basis, transporting gas around the UK to eight distribution networks. Within the eight distribution networks, there are twelve Local Distribution Zones which deliver gas to the customer. Each LDZ is owned and operated by one company, again on a monopolistic basis. In Scotland the LDZ is owned by Scotia Gas Networks operating as Scotland Gas Networks. Many of the installation, repair and maintenance activities of the gas network asset owners are, in practice carried out by network construction contractors for example, Alfred McAlpine, and Turiff.

Downstream gas consists of all activities that take place on the customers’ side of the main control valve and includes including emergency service operations (emergency service operations involves carrying out the first call response to a reported gas emergency, assessing the situation and making the necessary repair or requesting assistance). In Scotland within the gas downstream sub industry there are currently 10,700 registered gas operatives working in 2,800 businesses. This sub industry is characterised by a plethora of self employed and very small companies providing installation and maintenance services of gas equipment to industrial, commercial and domestic customers. British Gas Services is the largest operator in the installation and maintenance of domestic central heating and gas appliances. In Scotland, British Gas Services operates under the brand name Scottish Gas.

The number of operatives in each of the 2,800 business is as follows:

Number of Operatives	Number of Businesses
1	1916
2-10	782
11-30	68
30-50	17
50-100	12
100-200	4
200+	1

Statistical data for the upstream industry is unavailable due to the very small numbers involved (less than 50 businesses) compromising confidentiality restrictions.

Between 1986 and 2005, total employment levels across all of EU Skills industries have decreased by approximately one quarter. In line with employment patterns across the whole economy, the occupations that have seen particularly high reductions in staffing levels are admin/secretarial, skilled technical and low/non-skilled occupations.

Within the upstream gas sub sector these workforce reductions are mainly the result of the restructuring that has occurred since privatisation in the late 1980s and the subsequent outsourcing of a number of operations. Therefore, the number of people actually working on key activities within and for, the industry is estimated to have remained stable; it is just that the relationship between the employer and the industry has changed.

The gas downstream industry is experiencing an aging workforce relative to the Scottish economy as a whole. This is demonstrated in the table below.

Age	Scotland %	Gas (Upstream) %	Gas (Downstream) %
16-24	16	18	12
25-34	24	27	22
35-44	24	28	28
45-54	24	21	25
55-64	11	6	12
64+	1	0	1

The gas industry has a long tradition of using Modern Apprenticeships as a major pathway for the introduction and development of new entrants into the sector. Modern Apprenticeships are an ideal recruitment and training tool that to bring new people into the sector, address the ageing workforce and tackle the particular gaps in skilled technical roles. This Modern Apprenticeship provides employers with the ability to 'grow your own' workforce - critical today where skilled employees are becoming increasingly difficult to recruit.

Skills gaps are caused by many factors including:

- Hard to fill vacancies in the external market place
- Rapidly changing global market
- Intense competition
- Technological innovation
- Escalating customer demands

The Office for Gas and Electricity Markets (Ofgem) is the economic regulator for the electricity and gas markets in Great Britain which sets profit levels for asset owners during five yearly Price Control Reviews (PCR). Historically, this relatively stop-start nature of the regulation process with its PCR has affected skills gaps because, in simple terms, tranches of money are released every five years. Examination of spending profiles by the asset owners shows reduced expenditure in the 12 month period either side of the periodic price review, followed by a high level of activity. Investment made in one PCR period is not returned until the next; this pattern has made retaining skilled staff difficult.

During the last PCR the gas distribution network requested spend for Apprenticeships to tackle anticipated skills gaps based on evidence in a workforce model developed by EU Skills. Ofgem agreed to an additional £72m profit within the regulatory settlement which must be ringfenced for the recruitment and training of Apprenticeships from April 2008, for the next five years.

In addition, the length of contracts issued by asset owners has historically been too short to warrant investment in Modern Apprenticeships. Current contracts now have a greater longevity and contractors are looking to "grow their own" workforce through Modern Apprenticeships.

Modern Apprenticeships are particularly suitable for this industry because of the safety requirements of the work undertaken and the need to ensure that new entrants have sufficient periods of on-job training to ensure that whole job competence is achieved. Modern Apprenticeships offer employers and Apprentices alike an ideal platform to achieve this.

In March 1991 the Health and Safety Executive (HSE) introduced a legal requirement for all those engaged in domestic, commercial and industrial gas activities, whether employers or self employed people, to register with the Council of Registered Gas Installers (CORGI). CORGI is the national watchdog for gas safety in the United Kingdom. CORGI registration demonstrates competence in matters of gas safety for work on natural gas and liquid petroleum appliances. Applicants must demonstrate a wide range of knowledge, skills and experience before undertaking the assessments necessary for registration.

CORGI registration is due to change. On 27 July 2007, the HSE launched a competition for a new gas registration scheme aimed to improve gas safety, and bring enhanced benefits to gas consumers and installers across Great Britain. On 18 June 2008, the HSE announced that it has selected Capita as its preferred bidder to run the new registration scheme for gas installers from 1 April 2009. The main differences between the bid from Capita and CORGI the other bidder, lay in their approaches to introducing innovation to the scheme, promoting gas safety and a new brand, delivering efficiencies and the continuous improvement required.

The S/NVQs used within the Modern Apprenticeship are linked to the Accredited Certification Scheme (ACS) which is the mechanism used to re-register existing gas industry employees with CORGI on a five year cycle.

Two of the S/NVQs within this framework are aligned directly to ACS. By providing ACS alignment within the qualifications, operatives will be eligible to apply for CORGI gas operative registration without having to undertake further testing by external bodies.

Agreeing the process of registration through achieving aligned qualifications will be a critical role for CAPITA moving forward.

This MA addresses all parts of the gas industry in Scotland including:

Upstream

Gas network operations

Downstream

Domestic natural gas installation and/or maintenance
Industrial and commercial gas installation and maintenance
Emergency service operations

The MA is appropriate for all new entrants and existing employees intended for skilled technical roles, it is expected that approximately 550 apprentices per year will benefit. The recent successes for the gas industry provide a real opportunity for the expansion of uptake onto the MA. Employers are critically aware of the effects skills shortages will have on their competitive edge, they have supplemented resource through the Ofgem agreement and have contractual incentives to upskill their workforce through MAs. This is a very positive climate to introduce an enhanced MA which now underpins a broader range of job roles within the gas industry.

3 Summary of Framework

Diagram showing the contents of the Modern Apprenticeship in the Gas Industry

Mandatory outcomes

Note this version replaces the version dated June 2012

SNVQ Level 3

ONE of the following SNVQs must be achieved:

- NVQ in Industrial and Commercial Gas Installation and Maintenance 500/1720/2+
- SVQ in Domestic Natural Gas Installation and Maintenance (ACS) G95A 23
- SVQ in Domestic Natural Gas Maintenance G956 23
- NVQ in Gas Network Operations - Craft 100/2045/7+

Equivalent SNVQs from other awarding bodies may also be used. +NVQ only, no SVQs are currently available.

Core Skills

ALL of the following core skills must be achieved. See below for separate certification requirements.

Communication	SCQF level 5	F427 04*
Working With Others	SCQF level 4	F42N 04*
Problem Solving	SCQF level 4	F42J 04*
Information Technology	SCQF level 4	F42E 04*
Numeracy	SCQF level 4	F42A 04*

For candidates undertaking SVQs G95A 23 and G956 23 Information Technology, Numeracy and Working with Others core skills must be separately certificated.

For candidates undertaking NVQ 100/2045/7 and 500/1720/2, Communication, Information Technology and Numeracy core skills must be separately certificated.

**Reference numbers are for SQA core skills. Equivalent core skills from other awarding bodies may also be used.*

Energy & Utility Skills Gas MA Workbook

All candidates must complete the bespoke Gas Modern Apprenticeship Workbook which has been produced to complement this framework. (More details are given in section 4.)

Optional Outcomes

Energy & Utility Skills recommends the following qualifications as optional outcomes that will enhance the learning and skills development of the Modern Apprentice:

- ECDL
- IOSH or NEBOSH Health and Safety Courses
- Energy Efficiency Courses
- City & Guilds Domestic Natural Gas Installation and Maintenance level 2 VRQ
- City & Guilds Complex Domestic Natural Gas Installation and Maintenance level 3 VRQ
- City & Guilds Emergency Gas Operations level 3 VRQ.

4 The Framework

The mandatory and optional content of the Modern Apprenticeship in the Gas Industry is as follows:

Mandatory Outcomes

1 SNVQ level 3

ONE of the following SNVQs at level 3 must be achieved:

- * NVQ in Industrial and Commercial Gas Installation and Maintenance 500/1720/2+
- * SVQ in Domestic Natural Gas Installation and Maintenance (ACS) G95A 23
- * SVQ in Domestic Natural Gas Maintenance G956 23
- * Gas Network Operations - Craft 100/2045/7*+

Equivalent SNVQs from other awarding bodies may also be used. +NVQ only, no SVQs are currently available.

Scottish Vocational Qualifications (SVQs) are work-based qualifications, which are based on national occupational standards of competence drawn up by representatives from each industry sector. SVQs are made up of units – normally between six and ten – which break down a job into separate functions reflecting the different kinds of activities of a job. SVQs are available at five levels – although most are at level 2 and level 3. When someone has achieved an SVQ, there is a guarantee that they have the skills and knowledge they need to do their job. All Scottish Modern Apprenticeships must contain an SVQ (or NVQ) at level 3 or above.

2 Core Skills**

ALL of the following core skills must be achieved. See below for separate certification requirements.

- | | | |
|--------------------------|--------------|----------|
| * Communication | SCQF level 5 | F427 04* |
| * Working With Others | SCQF level 4 | F42N 04* |
| * Problem Solving | SCQF level 4 | F42J 04* |
| * Information Technology | SCQF level 4 | F42E 04* |
| * Numeracy | SCQF level 4 | F42A 04* |

For candidates undertaking SVQs G95A 23, G956 23 Information Technology, Numeracy and Working with Others core skills must be separately certificated.

For candidates undertaking NVQ 100/2045/7, Communication, Information Technology and Numeracy core skills must be separately certificated.

**Reference numbers are for SQA core skills. Equivalent core skills from other awarding bodies may also be used.*

Core Skills are skills and abilities which everyone needs in their work. This is true for every job in every workplace. Core Skills also feature in National Qualifications such as Standard Grades and Highers and from 2000; Scottish candidates have been issued with a core skills profile on their Scottish Qualifications Certificate. Candidates who have already been certificated as achieving core skills at the levels given above – either in the workplace or at school or college - do not need to repeat these core skills as part of the Modern Apprenticeship Framework.

3 Energy & Utility Skills Gas Modern Apprenticeship Workbook

The Workbook has been designed to ensure the Modern Apprentice is knowledgeable about the organisation and industry they are working in, as well as aware of environmental issues and sustainability. Many Modern Apprentices working for the large employers will cover all of this in their induction. The workbook is designed to reinforce the knowledge gained in induction but it is also there for those Modern Apprentices who may not have the same level of induction as others. Copies of the Workbook are available from Energy & Utility Skills.

Optional Outcomes

Energy & Utility Skills recommends the following qualifications as optional outcomes that will enhance the learning and skills development of the Modern Apprentice:

- ECDL
- IOSH or NEBOSH Health and Safety Courses
- Energy Efficiency Courses
- City & Guilds Domestic Natural Gas Installation and Maintenance level 2 VRQ
- City & Guilds Complex Domestic Natural Gas Installation and Maintenance level 3 VRQ
- City & Guilds Emergency Gas Operations level 3 VRQ.

5 Registration and certification

This Scottish Modern Apprenticeship is managed by Energy & Utility Skills. Energy & Utility Skills is the first point of contact for any enquiries in relation to the Framework. Contact details:

Energy & Utility Skills Ltd
Friars Gate
1011 Stratford Road
Shirley
Solihull
B90 4BN

Tel: 0845 077 99 22
Email: enquiries@euskills.co.uk
Web: www.euskills.co.uk

For enquiries relating to Modern Apprenticeship Registration and Certification please contact Rebecca Clay on the above number.

Energy & Utility Skills will register all Scottish Modern Apprentices undertaking this Framework. **All Modern Apprentices must be registered with Energy & Utility Skills within 4 weeks of starting their apprenticeship.** Registration can be made by completing the Training Plan and Training Agreement in Appendix 3 and sending these to the above address. In the case of MAs which receive funding from LECs it is acceptable for the LEC Training Plan to be used on the condition that it includes all relevant information as set out in the MA Training Plan.

Energy & Utility Skills will issue a Modern Apprenticeship Certificate of Completion to those Modern Apprentices who have completed the mandatory outcomes of the Framework. Before a certificate is issued, Modern Apprenticeship Centres must submit evidence to the Energy & Utility Skills that the mandatory outcomes have been achieved. This will normally be in the form of photocopies of certificates from awarding bodies.

Requests for registration and certification should be made to the Energy & Utility Skills at the address above or obtained from www.euskills.co.uk.

SSC Service level

Energy & Utility Skills undertakes to confirm the registration of candidates in writing within 8 weeks of receipt of the relevant Training Plan and Training Agreement. Each candidate will be issued with a unique registration number.

Energy & Utility Skills also undertakes to issue Certificates of Completion within 4 weeks of receipt of the appropriate evidence that a candidate has completed the outcomes as stated in the Training Plan.

6 Recruitment and selection

The recruitment and selection of Modern Apprentices is primarily the responsibility of the employer. However, the following guidance is given:

- * Employees may enter a Modern Apprenticeship from the age of 16. There is no upper age limit.
- * The Modern Apprenticeship is designed to attract high quality people to the industry. Achievement of academic qualifications is one way of assessing the suitability of applicants. However it should be stressed that no persons should be deterred from applying for a Modern Apprenticeship because of a lack of formal educational qualifications. As well as traditional qualifications such as Standard and Highers, employers should also be aware of newer vocational qualifications or vocational activity undertaken with academic institutions such as volunteering activity.
- * The following factors may also influence the selection process:
 - * performance during a formal interview process
 - * references
 - * relevant work experience
 - * trial observation period.
- * Employers should be aware of the nature, relevance and quality of foreign qualifications and make appropriate allowances concerning entry requirements.
- * In order to promote and maintain the high status of the Modern Apprenticeship within the industry all literature distributed for recruitment purposes should emphasise the high standards of achievement expected of the candidate.
- * Employers may wish to contact Careers Scotland and the SSB for advice and guidance on recruitment and selection. The Careers Scotland web site is at: www.careers-scotland.org.uk

There are no specific entry requirements for this Framework. However, the apprentice MUST be in a job role that supports the completion of the S/NVQ and should be assessed to have the ability to complete all components of the framework prior to registration. Employers and providers are encouraged to aid achievement of the framework and may find the following useful:

- Using a robust selection process
- Using recognised initial assessment tools
- Ensuring the Modern Apprentice's job role supports the completion of the S/NVQ
- Making the learning relevant and interesting.

7 Equal opportunities

Modern Apprenticeships should ensure that there is equality of opportunity for all and any barriers (real or perceived) are addressed to support anyone seeking to enter employment and undertaking the Modern Apprenticeship.

All MAs supported by the Enterprise Networks must conform to Local Enterprise Companies (LECs) contractual requirements on equal opportunities. All employers of Modern Apprentices should have an Equal Opportunities policy statement.

8 Health and safety

All aspects of health and safety at work must be recognised within the delivery of this Modern Apprenticeship Framework and all statutory requirements be adhered to.

It is a key aspect of the induction period of the Modern Apprenticeship that apprentices are fully informed both of the regulations and that they and their employers are bound by these regulations. Modern Apprentices should be made aware of their rights and duties with regard to health and safety.

All Modern Apprentices supported by the Enterprise Networks will be required to satisfy the LEC as to the adequacy of its Health and Safety policy and systems.

9 Contracts

The following three contracts are essential to the successful outcome of the Modern Apprenticeship programme:

- 1 Contract of employment signed by the employer and the Modern Apprentice
- 2 Energy & Utility Skills Training Agreement - this agreement outlines the basis of the modern apprenticeship, refers to the contract of employment and includes Health and Safety responsibilities.
- 3 Energy & Utility Skills Training Plan - this plan outlines the selected outcomes and the expected duration of the apprenticeship. In cases where funding is offered by a LEC, the LEC Training Plan will be sufficient on condition that it contains all relevant information as set out in the MA Training Plan at Appendix 2. Training Plans may be modified to reflect changing circumstances; however it is essential that Energy & Utility Skills is notified of any changes.

10 Employment status of Modern Apprentices

It is important that the sector offers genuine employment and career prospects to those people it wishes to attract through Modern Apprenticeships. Accordingly, **all apprentices must be employed for the duration of the apprenticeship.**

11 Terms and conditions of employment

In order to compete with other sectors offering Modern Apprenticeships, attractive packages will need to be developed by employers in the sector. The terms and conditions of employment for individual Modern Apprentices will be agreed between the employer and the apprentice and should form the contract of employment.

12 Training and development

Delivery

Training delivery can take many forms under the Modern Apprenticeship system. Some organisations may become approved S/NVQ Assessment Centres; others may join consortia or use peripatetic assessors. Some large employers will be able to complete all the training and development in-house, but most employers will find that some of the training and development will have to take place away from the normal work-site. In particular the underpinning knowledge requirements are often more suited to delivery by outside training providers which might include:

- * private training organisations
- * colleges / universities
- * other employers

Such knowledge could be delivered through training courses or through open/distance learning packages.

The option of sharing training and assessment resources amongst a cluster of employers (or across the divisions of a larger employer) will be particularly appealing to those firms which do not have the resources to provide all of the training and development. Assessment can be provided by these bodies, but the assessors and the training centre must be approved by the awarding bodies for the S/NVQ and core skills where appropriate.

Approved Modern Apprenticeship Centres

The following centres are approved by Energy & Utility Skills to deliver the Gas Modern Apprenticeship:

- Aberdeen College
- Cardonald College
- Claverhouse Group
- Dumfries & Galloway College
- Edinburgh's Telford College
- Forth Valley College
- Glasgow City Council
- Glasgow Metropolitan College
- Carnegie College (formerly Lauder College)
- Reid Kerr College
- Scottish Gas Engineering Academy
- Tullos Training
- UHI Millennium Institute
- University of Glasgow.

Please contact Energy & Utility Skills for an up to date list of approved centres.

The SSB training plan

The plan is required to identify:

- 1 The selected Framework outcomes, specifying whether or not separate certification of the Core Skills is being sought.
- 2 Any credit to be applied for by Accreditation of Prior Learning by the Modern Apprentice.
- 3 A timetable for achievement of the selected Framework outcomes, linked to regular progress reviews.

The Training Plan should take into account any relevant previous training and development, education or work experience. Not all Modern Apprentices need have different plans, but many will vary. Moreover as reviews take place and circumstances change so the plan itself can be modified.

However any changes must:

- be subject to the quality provisions of the LEC (if the MA is being financially supported by SE or HIE)
- comply with the stipulations of this Framework
- meet the needs of the employer and apprentice.

A sample Training Plan is provided at Appendix 3 of this document, however, for those Modern Apprentices funded by LECs it is sufficient to submit the LEC Training Plan on condition that it covers the same information required in the MA Training Plan.

13 Consultation Process

EU Skills is keenly aware of the importance of conducting the most robust consultation process possible to ensure that the Modern Apprenticeship (MA) underpins the requirements of every employer that may wish to utilise it.

The current Gas Industry MA was approved on 20 April 2006. Revised in September 2015 to take account of qualifications that have been withdrawn. Level 2 and 3 NVQs in industrial and commercial gas installation and maintenance have subsequently been accredited (April 2007) and delivered in Scotland by Carnegie College to local and national employers. This employer base has requested a broader training opportunity for NVQ candidates and is seeking this MA as the ideal progression opportunity for the candidates completing the level 2 NVQ.

EU Skills has conducted consultation on the content of an Industrial and Commercial Gas Installation and Maintenance pathway within the existing Gas Industry MA.

In order to consult with industry, providers and stakeholders, a consultation workshop was held on 1 May at Carnegie College, Dunfermline. This was an evening event to accommodate SMEs. Using EU Skill's CRM system, a list of potential invitees who had a direct interest in the Industrial & Commercial Catering market was generated. Carnegie college also provided the contact details for the employers they work with. These companies varied in size, ranging from sole traders through to larger nationals and trade associations. Over 50 companies were contacted in total.

A briefing, agenda and invitation were circulated electronically via email, E-update (EU Skills monthly electronic newsletter) and on the EU Skills website.

Unfortunately, not all the invited parties were able to attend. Those that expressed an interest, sent apologies and asked to be involved have been spoken with and/or met in person since the consultation workshop to provide input. This wider consultation ratified the agreements reached at the workshop.

During the workshop a number of topics were discussed, namely:

- Overview of the process
- Business need
- The value of a level 2 pathway
- Apprenticeship content
- Progression opportunities
- Building capacity
- Employed status
- Completion rates
- Monitoring and review
- Feedback

The workshop discussion provided very valuable feedback which included the following points of note:

- The group were keen for Industrial and commercial gas to be integrated as a pathway within the existing Gas MA rather than developed as a new stand alone MA.
- While the level 2 NVQ was deemed to be valuable training the group consensus was that the industrial and commercial gas MA should be at level 3 only.
- The group debated the core skills levels in some depth and agreed that they must not be changed from those included within the current MA since these are the levels required to competently conduct the job role a successful Apprentice would undertake. For example, the core skill in communication should be achieved at SCQF Level 5 because many gas engineers need to communicate and discuss complex problems and solutions with customers.
- The group debated the level of IT required and whilst it was acknowledged that some apprentices would not use IT in their jobs, the groups felt it was important to ensure the opportunity for all to be IT literate. Many apprentices were now using laptops and, as the framework would be approved for a minimum of three years, it was important that IT was at a more than basic level.
- With an expected annual uptake of 50 learners per annum onto the proposed new pathway it was deemed that one centre would be adequate since the location was central and easily accessible.
- The business rationale for this MA was enforced by an employer who had advertised a position of Industrial & Commercial Gas Fitter and did not receive a single application. This experience was confirmed by other employers present. The discussion demonstrated that it can be incredibly difficult to buy in the skilled labour required; MAs are an ideal recruitment and training tool that allow employers to grow their own workforce.
- This MA pathway is critical to employers operating in industrial and commercial gas. Current entry and training routes to the sub sector are not fit for purpose. The only viable entry route available is through the domestic natural gas installation and maintenance S/NVQs plus a change over course which does not deliver the required experience.
- Completion rates can be enhanced in a number of ways. Those suggested include; good selection process, good initial assessment, making the learning interesting and relevant, Commitment from both the apprentice and employer – explanation to the employer of what the MA means to them and how they can support the apprentice, ensuring the apprentice is in a job role that supports the completion of the S/NVQ and a clearer demonstration of progression routes for successful apprentices upon completion.
- Delegates discussed the Gas Industry Modern Apprenticeship Workbook which is currently in use and supported its use in the Industrial and Commercial gas pathway. Many larger employers would already be covering the areas in the workbook but delegates felt it would enhance the induction processes offered by the SME. The workbook has been working with a great deal of success in the Gas Industry MA since it was approved in April 2006 and employers value the knowledge gained by an apprentice. It was noted that the workbook could be integrated into other learning.

14 Career progression

Historically ex-Apprentices have progressed significantly in the industry and many have gone on to become Supervisors and Managers. Many have remained in the industry for their whole career although may move around different employers. EU Skills seeks the feedback of current and ex Apprentices through the development of case studies on their experiences. These case studies can be viewed at <http://www.euskills.co.uk/careers/>

The Apprenticeship provides the best possible preparation to achieving skilled status within the Industry. Ex Apprentices may also, where appropriate, progress to higher education, higher-level work, or

horizontally or vertically within the gas industry. They can complete S/NVQs at the same level across the gas industry or progress to a level 4 qualifications increasing depth of knowledge and or progressing into management qualifications. A flow chart is attached at Appendix 4 showing career and qualification progression routes from S/NVQ level 1 through to Degree level.

Under normal circumstances, successful Apprentices can conduct the job roles in one of the following occupational areas:

Downstream

Gas Service Engineer
Emergency Service Operative
Gas Maintenance Engineer

Upstream

Gas Engineer

However, this will depend on the performance and motivation of the individual and the vacancies/opportunities available within the company. Ex-Apprentices can also progress horizontally within the sector to complete S/NVQs at the same level.

Throughout any career in the gas industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

The Apprentices knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of their induction process with the employer.

Appendices

Appendix 1

Stakeholder Responsibilities

Many organisations and individuals share the responsibility for ensuring that the Modern Apprenticeship programme is implemented to the highest possible standard. They include:

- * Sector Skills Bodies (SSBs)
- * Enterprise Networks and Local Enterprise Companies (LECs)
- * Awarding bodies
- * Training Providers
- * Modern Apprentice Group (MAG)
- * Careers Scotland
- * Employers
- * Modern Apprentices

Role of the Sector Skills Bodies

SSBs are responsible for developing Modern Apprenticeship Frameworks and are required to work with employers in their sectors to ensure that all Frameworks meet the needs of employers in their sectors.

For details on your sector's SSB visit www.ssascot.org.uk

Role of the Enterprise Networks and Local Enterprise Companies (LECs)

Financial support to assist with the training of Modern Apprenticeships in Scotland is administered in each area by the appropriate Local Enterprise Company (LEC). Organisations should contact their LEC to discuss financial support.

Further information is available from www.modernapprenticeships.com

Role of the awarding bodies

A significant proportion of the Modern Apprenticeship is based on the assessment of the apprentice against S/NVQs or S/NVQ units. These qualifications are accredited by the Scottish Qualifications Authority (SQA) and the Qualifications and Curriculum Authority and are offered by Awarding Bodies.

It is the responsibility of the Awarding Bodies to ensure that centres are approved, that assessors and verifiers are suitably qualified, trained and monitored, and that all of the assessment criteria of the S/NVQs and S/NVQ units are fully met.

Role of the Training Provider

The role of the training provider is important to the success of the Modern Apprenticeship. A training provider can be a further education college, a private or voluntary training company or in some cases the employer themselves or employer partnerships.

Training Providers are responsible for:

- Confirming an appropriate MA programme for candidates
- Agreeing the training needs of the candidates
- Agreeing roles and responsibilities for on the job training

- Agreeing where off the job training will be required and defining roles and responsibilities for this with relevant parties
- Ensuring trainee/candidate has access to the best quality training opportunities available
- Ensuring that the Modern Apprentices and employers fully understands the principles and processes of competence-based assessment
- Registering of MA candidates with the relevant SSB (and LEC if appropriate).
- Compiling and agreeing assessment schedules/assessment plans
- Judging performance evidence
- Completing assessment records
- Reviewing candidates progress at regular intervals
- Submitting records and evidence for moderation
- Advising the Modern Apprentice who to approach for support, advice, encouragement and in case of complaint

Role of MAG

MAG is an independent group drawn from key stakeholders involved in the management and delivery of the Modern Apprenticeship programme in Scotland.

MAG is responsible for:

- Approval and re-approval of MA Frameworks
- De-approval of MA Frameworks
- Overseeing the generic marketing thrust of the MA programme in Scotland
- Encouraging best practice across MA Frameworks and sectors

Role of Careers Scotland

Careers Scotland is the natural point of contact for the recruitment and career-related needs of employers and training providers in Scotland. It provides advice and guidance on the range of Modern Apprenticeships and training providers available.

Careers Scotland is responsible for:

- Supporting Modern Apprentices with ongoing Career Planning advice.
- Providing a vacancy handling service to employers and training providers.
- Providing initial assessment of candidates and match to suitable vacancies.
- Promoting vacancies on the Careers Scotland website.

Role of the Employer

Employer's responsibilities include:

- Paying new Modern Apprentices in accordance with the company's policy and in line with current legislation
- Agreeing roles and responsibilities for on the job training
- Agreeing where off the job training will be required and define roles and responsibilities for this with relevant parties
- Highlighting opportunities for the Modern Apprentice to demonstrate competence
- Meeting with Trainers, Assessors, Verifiers and the Modern Apprentices to review progress
- Witnessing candidate performance and verify evidence
- Releasing Modern Apprentices for college/off-the-job training in line with training plan
- Providing the experience, facilities and training necessary to achieve the outcomes of the training plan.
- Supporting and encouraging Modern Apprentices and rewarding achievement
- Taking responsibility for the Health & Safety of Modern Apprentices.

Role of the Modern Apprentice

Modern Apprentices have the same responsibilities to their employer as any other employee. In addition they have a range of commitments to their training programme.

Modern Apprentices' responsibilities include:

- Observing the company's terms and conditions of employment
- Agreeing a training/development plan with all parties involved
- Undertaking development in line with agreed training plan
- Attending meetings with trainers, assessors and verifiers as required
- Attending college/off-the-job training where required
- Providing evidence of competence
- Developing a collection of evidence (portfolio) and retain ownership of this throughout
- Behaving in a professional manner throughout

Appendix 2

Modern Apprenticeship Centres (MACs)

Modern Apprentices may only be registered through organisations approved by the SSB to deliver this Framework. Such approved organisations are called Modern Apprenticeship Centres (MACs)

The MAC may be the employer of the apprentice or a separate organisation such as a training provider, College of FE, or similar.

In order to be approved, organisations must make a formal application to the SSB, seeking approval and establishing that the centre satisfies the following criteria:

Either

1 be approved by an appropriate Awarding Body as a centre for the assessment of the relevant S/NVQ(s) at level 3 (and Scottish Core Skills if these are being separately certificated)

or

2 be capable of demonstrating a contractual relationship with another approved centre for the assessment of those units for which the MAC does not have approval from an appropriate Awarding Body.

In addition

Organisations that have contracts with the Enterprise Networks for the delivery of Modern Apprenticeships must have Scottish Quality Management System (SQMS) accreditation (or be prepared to work towards accreditation) or other quality system accepted by the Enterprise Networks. Organisations that are privately funding their Modern Apprenticeship programme are actively encouraged to seek SQMS accreditation, or other quality assurance system as agreed with the SSB.

The SSB will maintain a database of MACs for the delivery of the Framework within Scotland, which will be available to employers and others.

Organisations wishing to become MACs who have yet to obtain the necessary Awarding Body approval for assessment should first contact the Awarding Body direct.

Organisations wishing to be accredited with SQMS (or other appropriate quality system) should contact their LEC.

In addition to the assessment of the Modern Apprentice against the relevant standards set by the selected Framework outcomes, the MAC has responsibility for:

- * Entering into a formal training agreement with the employer and Modern Apprentice
- * Registering Modern Apprentices as candidates for the relevant S/NVQ(s) and other selected units with the appropriate Awarding Body
- * Registering Modern Apprentices with the SSB
- * Applying for the final 'Certificate of Completion' on behalf of Modern Apprentices
- * Informing the SSB of any material alterations to Modern Apprentices' training plans or desired changes to the selected Framework outcomes.

Appendix 3



MODERN APPRENTICESHIP SAMPLE TRAINING AGREEMENT

This Training Agreement is entered into by:

Name of Employer:	
Name of Modern Apprentice:	
Name of Modern Apprenticeship Centre:	

The **Employer’s responsibilities** are to:

- 1 employ the modern apprentice subject to the employer’s usual terms and conditions of employment;
- 2 provide the modern apprentice with the facilities, training and work place opportunities necessary to achieve the selected Framework outcomes specified in the apprentice’s personal training plan;
- 3 pay the modern apprentice an agreed salary which reflects the obligations of the employer and the opportunities for the apprentice;
- 4 in the event of the employer becoming unable to retain the modern apprentice after completion of the apprenticeship, to use reasonable endeavours to secure employment elsewhere;
- 5 in the event of the apprenticeship being terminated prematurely by either the employer or modern apprentice for any reason other than dismissal for unsatisfactory performance or misconduct, to use reasonable endeavours to secure employment and continuation of this apprenticeship elsewhere;
- 6 operate a formal Health and Safety policy and undertake the necessary legal and contractual responsibilities for health and safety of the modern apprentice; and
- 7 operate an Equal Opportunities policy which meets all legal requirements.

The **Modern Apprentice’s responsibilities** are to:

- 1 work for the employer in accordance with the agreed terms and conditions of employment;
- 2 undertake training, attend courses if required, keep records, and take assessments to be determined by the employer and/or Modern Apprenticeship Centre, and carry out such work as may be required in order to achieve the selected Framework outcomes specified in the apprentice’s personal training plan;
- 3 be diligent, punctual, behave in a responsible manner and in accordance with the requirements of Health and Safety legislation relating to the apprentice’s responsibilities as an individual; and
- 4 promote at all times the employer’s best interests.

The **Modern Apprenticeship Centre’s responsibilities** are to:

- 1 agree the content of the modern apprentice’s personal training plan as confirming that the selected Framework outcomes and training plans meet the criteria of this modern apprenticeship
- 2 contract with the employer to provide the training and assessment necessary to enable the modern apprentice to achieve the selected Framework outcomes specified in the apprentice’s personal training plan; and
- 3 use its best endeavours to ensure that the employer provides the modern apprentice with the facilities, training and work place opportunities necessary to achieve the selected Framework outcomes specified in the apprentice’s personal training plan.

This agreement to be signed by all parties:

Employer		Date:
Modern Apprentice <i>(or Parent/Guardian, if under 18)</i>		Date:
Modern Apprenticeship Centre		Date:



MODERN APPRENTICESHIP TRAINING PLAN

The Modern Apprenticeship Centre

Name:
Address:
Telephone:
Contact:

The Modern Apprentice

Full name:
Home address:
Work address:
Date of birth:

The Employer

Name:
Address:
Telephone:
Contact:

The Local Enterprise Company *(if applicable)*

Name:
Address:
Telephone:
Contact:

Framework selected outcomes

Mandatory outcomes

SVNQ level 3 Domestic Natural Gas Maintenance		
Mandatory units		
D8D 604	Design natural gas systems	
D8E N04	Specify programmes for working on natural gas systems	
D8E 404	Plan the work activities for natural gas systems and components	
D8D 204	*Commission and decommission natural gas systems	
D8E 304	Maintain a safe working environment for all natural gas related work	
D8D 704	Establish, maintain and develop effective working relationships with others for all natural gas related work	
D8D 504	Contribute to the improvement of business products and services for all natural gas related work	
D8C L04	Apply gas safety measures to natural gas related work activities	
D8E C04	*Service and maintain complex natural gas systems and components	
	* To achieve the full SVQ all contexts for Units * must be achieved. It should be noted that Unit certification based on a single context is not available for this qualification	
CONTEXTS		
	Cookers and laundry	
	Space Heating and Leisure	
	Central heating and water heating	
	Warm Air and Water Heating	
	Meters	
	Pipe work	

SVNQ level 3 Domestic Natural Gas Installation and Maintenance		
Mandatory units		
D8D 604	Design natural gas systems	
D8E N04	Specify programmes for working on natural gas systems	
D8E 404	Plan the work activities for natural gas systems and components	
D8E C04	*Install Complex Natural Gas Systems and Components This unit can be taken in the following units contexts: D8DA 04 Cooking and Laundry D8DL 04 Space Heating & Leisure D8D9 04 Central Heating & Water Heating D8DM 04 Warm Air & Water Heating D8DJ 04 Meters D8DK 04 Pipe work	
D8D 204	*Commission and decommission natural gas systems This unit can be taken in the following unit contexts: D8CV 04 Cooking and Laundry D8D3 04 Space Heating & Leisure D8CR 04 Central Heating & Water Heating D8D4 04 Warm Air & Water Heating D8CY 04 Meters D8D1 04 Pipe work	
D8E C04	*Service and maintain complex natural gas systems and components This unit can be taken in the following contexts: D8E6 04 Cooking and Laundry D8ED 04 Space Heating & Leisure D8E5 04 Central Heating & Water Heating D8EE 04 Warm Air & Water Heating D8E8 04 Meters D8EA 04 Pipe work	
D8E 304	Maintain a safe working environment for all natural gas related work	
D8D 704	Establish, maintain and develop effective working relationships with others for all natural gas related work	
D8D 504	Contribute to the improvement of business products and services for all natural gas related work	
D8C L04	Apply gas safety measures to natural gas related work activities	
	* To achieve the full SVQ all contexts for Units * must be achieved. It is recognised that a candidate may wish to undertake these Units* in only one context. In such cases the context will be clearly noted on the candidate's certificate. For example unit D8DA 04 Install Complex Natural Gas Systems and Components (Cooking & Laundry). However, the candidate will not be certificated for the full SVQ until all contexts have been achieved for Units *.	

NVQ level 3 Gas Network Operations Mandatory units		
047	Locate and avoid supply apparatus and sub-structure in diverse situations	
048	Excavate holes and trenches in ground and pavement structures in diverse situations	
049	Re-instate excavation and pavement surface in diverse situations	
050	Contribute to an efficient and effective work environment in diverse situations	
051	Contribute to health, safety and environment in the workplace in diverse situations	
052	Operate powered tools and equipment for routine and predictable requirements in diverse situations	
053	Control allocated resource to achieve requirements in diverse situations	
054	Install engineering products or assets in diverse situations	
055	Replace assembly or sub assembly components in diverse situations	
056	Conduct specified testing of engineering products or assets in diverse situations	
057	Prepare work areas and materials for engineering activities in diverse situations	
058	Analyse and interpret the results of engineering activities in diverse situations	
	PLUS ONE UNIT FROM OPTIONAL UNITS A, ONE FROM OPTIONAL UNITS B AND THREE FROM OPTIONAL UNITS C	
Optional Units A (One from)		
059	Prepare resources and segregate the area for highway works in diverse situations	
060	Prepare resources and segregate the area for site works in diverse situations	
Optional Units B (One from)		
061	Join materials by manually controlled thermal processes in diverse situations	
062	Join materials by machine controlled thermal processes in diverse situations	
Optional Units C (Three from)		
063	Restore components to operational condition by repairs in diverse situations	
064	Contribute to the organisation of work activities in diverse situations	
065	Contribute to effective working relationships in diverse situations	
066	Determine technical requirements to achieve objectives in diverse situations	
067	Determine resource requirements to achieve objectives in diverse situations	
068	Plan for engineering activities in diverse situations	

NVQ level 3 in Industrial and Commercial Gas Installation and Maintenance		
A- Appliances and Systems Pathway		
A/103/9437	Specify programmes for working on gas systems and components	
F/103/9276	Plan work activities for natural gas systems and components	
J/103/9280	Contribute to the improvement of business products and services	
H/103/9285	Install complex gas systems and components	
F/103/9285	Service and maintain complex gas systems and components	
B – Commercial Catering Pathway		
A/103/9437	Specify programmes for working on gas systems and components	
F/103/9276	Plan work activities for natural gas systems and components	
J/103/9280	Contribute to the improvement of business products and services	
H/103/9285	Install complex gas systems and components	
F/103/9438	Service and maintain complex gas systems and components	

For the Appliances and Systems pathway, candidates must complete all units in Group A
 For the Commercial Catering pathway, candidates must complete all units in Group B

Core Skills <i>(The minimum level required is indicated in brackets)</i>		
1	Communication (SCQF Level 5)	
2	Working with others (SCQF Level 4)	
3	Numeracy (SCQF Level 4)	
4	Information technology (SCQF Level 4)	
5	Problem Solving (SCQF Level 4)	

If you require assistance in completing this form, please contact:

Rebecca Clay
 Energy & Utility Skills
 Friars Gate
 1011 Stratford Road
 Shirley
 Solihull
 B90 4BN
 Tel: 0845 077 99 22
 Email: enquiries@euskills.co.uk
 Web: www.euskills.co.uk

Appendix 4

Career Progression Gas Industry

